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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF: :

Tristan BARBEYRON et al. : EXAMINER: PATTERSON, C.L.

SERIAL NO.: 09/988,200 : GROUP ART UNIT: 1652

FILED: November 19, 2001 :

FOR: GLYCOSYL HYDROLASE GENES AND THEIR USE FOR PRODUCING ENZYMES FOR THE BIO-DEGRADATION OF CARRAGEENANS

RESPONSE TO RESTRICTION REQUIREMENT

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

Sir:

This is in response to the requirement for restriction that was made under 35 U.S.C. §§121 and 372 on April 7, 2003, the period for response having been extended from May 7, 2003 to August 7, 2003 by a Petition for a Three-Month Extension of Time incorporated herewith.

The Office has required restriction in the present application as follows:

Group I, claims 12-15, drawn to a protein of SEQ ID NO:6 or encoded by a nucleic acid of SEQ ID NO:5.

Group II, claims 12-14 and 16,drawn to a protein of SEQ ID NO:8 or encoded by a nucleic acid of SEQ ID NO:7.

Group III, claim 17, drawn to a method of producing kappa-oligocarrageenans comprising genetically modifying a host cell with a nucleic acid of SEQ ID NO:5.

Group IV, claim 17, drawn to a method of producing kappa-oligocarrageenans

comprising genetically modifying a host cell with a nucleic acid of SEQ ID NO:7.

It is Applicants' belief, however, that the Office intended the restriction requirement to read as follows:

> Group I, claims 12-15, drawn to a protein of SEQ ID NO:**2** or encoded by a nucleic acid of SEQ ID NO:**1**.
>
> Group II, claims 12-14 and 16,drawn to a protein of SEQ ID NO:**4** or encoded by a nucleic acid of SEQ ID NO:**3**.
>
> Group III, claim 17, drawn to a method of producing kappa-oligocarrageenans comprising genetically modifying a host cell with a nucleic acid of SEQ ID NO:**1**.
>
> Group IV, claim 17, drawn to a method of producing kappa-oligocarrageenans comprising genetically modifying a host cell with a nucleic acid of SEQ ID NO:**3**.

Applicants will therefore respond to the restriction requirement based on their interpretation recited above. If the Applicants interpretation is incorrect, Applicants invite the Office to contact the undersigned by telephone.

Based on the above, Applicants hereby elect to prosecute, with traverse, the invention of Group I, claims 12-15 drawn to (i) a protein of SEQ ID NO:2; (ii) a protein encoded by a nucleic acid of SEQ ID NO:1; and (iii) a protein having a hydrophobic cluster analysis (HCA) score with the iota-carrageenase of *Alteromonas fortis* which is greater than or equal to 65% over the domain extending between amino acids 164 and 311 of the amino acid sequence of *Alteromonas fortis* that is SEQ ID NO: 2.

Applicants' election is made with traverse for the following reasons:

The Office has analyzed the present claims under the unity rules of the Patent Cooperation Treaty (PCT). However, this application is a divisional application of U.S.

national phase application Serial No. 09/269,731, and therefore should not be subject to the unity requirements set out in PCT Rules 13.1-13.4 and 37 C.F.R. §1.475. Accordingly, Applicants respectfully submit that the restriction requirement is unsustainable, and it should therefore be withdrawn.

Furthermore, restriction is only proper if the claims of the restricted groups are either independent or patentably distinct, and there is a burden in searching the entire application. MPEP §803. Applicants respectfully traverse the restriction requirement on the grounds that the Office has not provided adequate reasons and/or examples to support its conclusion of patentable distinctness or shown that a burden exists in searching all the claims.

The Office has characterized the inventions of Groups I and II as distinct because the "proteins of SEQ ID NO:6 (sic 2) and 8 (sic 4)...are completely structurally different." Page 2, last paragraph, of the Official Action. Applicants respectfully point out that, under U.S. restriction practice, the criteria for distinctness are stated in MPEP §806.05-§806.05(i). Applicants note that nowhere in the aforementioned sections of the MPEP is structural distinctness stated to be a basis for rejection. Accordingly, a mere structural difference of the claimed proteins is not a valid basis for restriction. The restriction requirement is therefore believed to be improper, and it should be withdrawn.

The Office has characterized the inventions of Groups I and II as distinct because the "...nucleic acids of SEQ ID NO:5 (sic 1) and 7 (sic 3) are completely structurally different." Page 2, last paragraph, of the Official Action While Applicants take note that nucleotide sequences encoding different proteins are structurally different chemical compounds and would normally constitute independent and distinct inventions within the meaning of 35

U.S.C. 121, as stated in MPEP §803.04, the Commissioner has partially waived the requirements of 37 C.F.R. 1.141 *et seq.* to permit a "reasonable number" of such nucleotide sequences to be claimed in a single application. See *Examination of Patent Applications Containing Nucleotide Sequences*, 1192 O.G. 68 (November 19, 1996). As noted in MPEP §803.04, up to ten nucleotide sequences constitute a reasonable number for examination purposes, and must be examined in a single application without restriction. Accordingly, a mere structural difference of the claimed nucleotide sequences is not a valid basis for restriction. The restriction requirement is therefore believed to be improper, and it should be withdrawn.

Applicants also respectfully traverse the restriction requirement on the grounds that the Office has not shown even a *prima facie* case that a serious burden would be placed on the Examiner if the inventions of Groups I-IV were to be examined together. Accordingly, since it has not been shown by the Office that a serious burden would be placed on the Examiner if the inventions of Groups I-IV were to be examined together, Applicants submit that restriction cannot be properly maintained between Groups I-IV. The restriction requirement is clearly improper, and it should be withdrawn.

Finally, Applicants note that MPEP §821.4 states, "where the application as originally filed discloses the product and the process for making and/or using the product, and only claims directed to the product are presented for examination, when a product claim is found allowable, applicant may present claims directed to the process of making and/or using the patentable product." Applicants respectfully submit that should the elected group be found allowable, the non elected claims directed to a method of using the product should be

rejoined.

Applicants respectfully submit that the above-identified application is now in condition for examination on the merits, and early notice of such action is earnestly solicited.

Applicants hereby petition the Commissioner for Patents to extend the time for reply to the Official Action dated March 25, 2003 for three (3) months from May 7, 2003 to August 7, 2003. A duly completed credit card authorization form is attached to effect payment of the extension fee.

Respectfully submitted

Malcolm J. MacDonald

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Malcolm J. MacDonald
Reg. No. 40,250
Tel: (703) 412-1155 Ex. 24